

Abstract

A pyrotechnic side impact inflator is provided for inflating a side airbag in an automobile. The inflator has a few number of physical components and has a tubular shape. The inflator has an igniter that directly ignites the main gas generant in the inflator. The burning of the gas generant produces combustion products or inflation gas that is utilized to inflate a folded airbag. The inflation gas travels in a tortuous path in the inflator, which reduces the kinetic energy associated with the gas molecules thereby cooling the inflation gas.